

nigra; late cuneata, obliqua, basi acuta, 10-13 mm. longa et 12 mm. lata, in alam valde obtusa producta.

Hb. in distr. Coolgardie prope Koorarawalyee, in camp's arenosis apertis, fl. m. Feb. Mart., *Gardner* 16411, TYPUS; etiam haud procul Southern Cross in acacietis lutosus.

Frederico Jacobo Lullfitz nominata Hortis Botanicorum Perthensis, speciminum ascripto, viro botanicorum speciminum colligendorum studiosissimo et itinere quod nuper peregrinus comiti benigno.

The species is close to *B. Benthamiana* C. A. Gardn., from which it differs in the much smaller size and different habit, larger leaves with divaricate pungent-pointed lobes, much larger flowering spikes with larger and densely tomentose (not silky appressed hairy) perianths, and in the differently shaped and larger fruiting spikes with much larger follicles and persistent perianths.

*Banksia Elderiana* F. Muell. et Tate has a similar habit and foliage, but the spikes are always nutant, and the smaller perianths are glabrous in the upper half, and appressed-silky in the lower, the cones much smaller, and the follicle much smaller and more compressed.

## AN ABORIGINAL MEAL

By I. M. CRAWFORD, W.A. Museum, Perth.

In January, 1965, Mr. M. Gillett donated to the Museum a small collection of bones which he had picked up on a camp site about 60 miles west of the South Australian border on the 27th parallel. The bones are believed to be the remnants of a meal (possibly more than one) eaten by Aborigines. The bones have been weathered slightly, but do not appear to be many years old. The location of the site suggests that the meal was eaten by Aborigines travelling between settlements, and that these Aborigines had temporarily reverted from a European type of diet to a traditional one. The bones, therefore, give some indication of the animal element in the present day diet of Aborigines who live by traditional means.

Mrs. Helen Henderson has identified among the specimens Domestic Cat (*Felis catus*), and European Rabbit (*Oryctolagus cuniculus*) on the basis of dentition. A pelvic fragment does not belong to these species and agrees with kangaroo. It is too large to be fox or dog and is not wombat (*Lasiorhinus*) which might be expected in the area. All other non-dental fragments have been compared with skeletons of *Felis catus*, *Vulpes vulpes*, *Oryctolagus cuniculus*, *Isodon obsolus*, *Perameles bougainvillei*, *Trichosurus vulpecula*, *Lagorchestes conspicillatus*, *Macrotis lagotis*, and *Dasyurus geoffroyi*, all of which (or their close relatives) would not be unexpected in the area. *Lagorchestes hirsutus*, *Bettongia penicillata*, *Bettongia lesueuri*, and *Petrogale lateralis* could also occur in the area, but comparison has not been made with these. All these non-dental fragments correspond with either *Felis catus* or *Oryctolagus cuniculus* and no others.

Least numbers of individuals in the sample was calculated by the method of Ride (1960) (see Table 1). However, it must be recognised that, in a small sample, relative abundance measured by this means may not give a true indication of the proportion of the different species in the sample, since like all sampling techniques the method is most useful where numbers are high.

TABLE I

Species	No. of fragments in sample	Minimum no. of individuals
<i>Macropus</i> sp. (Kangaroo)	1	1
<i>Felis catus</i> (Domestic Cat)	25	2
<i>Oryctolagus cuniculus</i> (European Rabbit)	10	3

The discovery of rabbit and eat bones together with the kangaroo is not surprising, for the fact that Aborigines living by traditional means eat these animals is well known (Finlayson, 1960). This combination of animals is nevertheless important, for it indicates that Aboriginal diets may have been profoundly altered by the introduction of European animals. Rabbits entered the area between 1894 and 1907 (Ratcliffe, 1959) and eats had spread before 1891 (Finlayson, 1960). Their introduction probably reduced the native fauna, the rabbits being competitors with the herbivorous animals, and the eats being predators on small mammals and birds. It is therefore likely that the Aboriginal diet altered accordingly, probably during the early years of this century.

Information on the diets of Aborigines living in their traditional manners has seldom been collected. Cleland and Tindale (1959), and Meggitt (1962) have published lists of Aboriginal foods and Mr. Mark de Graaf has donated to the Museum samples of vegetable foods collected near the Warburton Mission. Moyle (1958) has published a brief list of plants eaten in the Rawlinson Range-Lake Maedonald area, together with a nutritional assessment of the value of these foods. Other writers have included short lists of animals and plants reputedly eaten by Aborigines. The only quantitative analysis of an Aboriginal diet has been made by Margaret McArthur (1960) in Arnhem Land. It is to be hoped that some research on the diets of a desert group will be carried out along these lines before all of the Aborigines come into settlements and permanently adopt European foods. To judge from the bones collected by Mr. Gillett such an analysis would find that introduced animals now formed an important element in the Aboriginal diet.

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## AQUATIC BIRDS OF HAMELIN POOL LAKE WESTERN AUSTRALIA

By JULIAN FORD, Perth.

Situated at the southern end of Hamelin Pool in Shark Bay, Hamelin Pool Station lies just within the semi-arid rainfall zone which receives less than 10 in. per annum. Most freshwater lakes within this area have an ephemeral existence, being filled at infrequent intervals because of the irregularity and unreliability of the rainfall. Near the Hamelin Pool Station homestead, however, a permanent slightly brackish lake of about four acres and other smaller pools have been produced artificially by an overflow from a deep artesian bore which flows unheeked along drains through the station. Being the only expanses of permanent relatively fresh water in the district, during the hot summer they attract an abundance of aquatic birds including many waders and ducks. These reinforce the sedentary population amongst which are the Little Grass Bird, Reed-Warbler and Spotted Crake.

During visits to the locality on January 31, 1959, April 2, 1962, November 14-15, 1964, December 15-19, 1964, and December 19-20, 1965, several observations were made which add to the knowledge of the distribution of Western Australian birds, in particular two rare waders which were recorded on the November 14-15 visit in the company of Mr. John Dell. In the following list, dates on which the various species were actually recorded are given with the number present placed in brackets. Where no bracketed figure is given after the date, no count was taken. For the relevant scientific names, reference should be made to *The Birds of Western Australia*, D. L. Serventy and H. M. Whittell, third edition, 1962.

Around the margins of the homestead lake are several patches of bulrush, *Typha angustifolia*, and an extensive area of *Samolus repens*, while the entire perimeter is covered with samphire, *Arthrocnemum arbusculum* and *A. leiostachyum*. A few bushes of *Nit-raria schoberi* and *Rhagodia sp.* are scattered around the lake and the surrounding country is vegetated with semi-arid wattle scrub consisting mainly of *Acacia sclerosperma*, *A. victoriae*, *A. tetragonophylla* and *A. coriacea*. Near the lake, the vegetation is rather open, there being areas of bare ground because of sheep grazing. Some of the smaller lakes are extensively overgrown with *Typha* rush.